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EXAMINER

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2612

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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 16, 27, and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new limitation of "said user-selectable portion of the contents of said buffer is determined by playing the contents of said buffer back to the user on a display of the camera and receiving a user selection to a beginning frame to be saved in said persistent form" in claims 1, 16, 27, and 34 is not supported by the specification.

Applicant argues, in the second full paragraph on page 12 of the amendment filed November 16, 2005, that the previous claim language contained the limitation of "playing the contents of said buffer backwards to the user..." and that it has now been changed to read "back" instead of "backwards", because the limitation backwards is ambiguous and could be interpreted to mean that the buffer contents are played in reverse chronological order. However, the examiner points out that page 17, lines 3-7 in the specification that the contents

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are not simply played "back", but rather they are played in a reverse chronological order.

Response to Arguments

Applicant's arguments with respect to claim 1, 16, 27, and 34 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 4-6, 13, 16-17, 24, 27-28, 31, and 34-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al. (US Patent # 6,424,795).
2. In regard to claim 1, note Takahashi discloses the use of an electronic camera apparatus, comprising an electronic optical sensing apparatus, said electronic optical sensing apparatus sensing optical images and converting sensed images to an electronic signal (column 5, lines 54-57), a buffer memory (column 6, lines 60-65), a video storage medium interface for storing video images captured by said optical sensing apparatus on a storage medium (column

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6, lines 40-47), and a controller which operates said electronic camera apparatus in at least one mode, said at least one mode including a first mode wherein said controller concurrently causes said video storage medium interface to store motion video captured by said optical sensing apparatus on a video storage medium at a first resolution, and to temporarily store video frames captured by said optical sensing apparatus in said buffer memory (column 7, lines 15-23; low resolution motion images and the high resolution still images can be processed and stored concurrently), and responsive to a first user command, saves at least one frame from said buffer memory in a persistent form at a second resolution, said second resolution being finer than said first resolution (column 12, lines 3-21; column 11, lines 57-60; and column 14, lines 9-12; input device 129 allows the user to select the images to be stored, and the high resolution still images are stored), that said controller, responsive to said first user command, saves a user-selectable portion of the contents of said buffer memory in a persistent form at said second resolution, said user-selectable portion being potentially less than all of the buffer contents (column 12, lines 3-21; column 11, lines 57-60; and column 14, lines 9-12; input device 129 allows the user to select the images, from the buffer 114, to be stored, and the high resolution still images are stored), and that said user-selectable portion of the contents of said buffer is determined by playing the contents of said buffer back to the user on a display of the camera and receiving a user selection to a beginning frame to be saved in said persistent form (column 12, lines 3-21; column 11, lines 57-60; and column 14, lines 9-12; input device 129 allows the

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user to select the images, from the buffer 114, to be stored, and the high resolution still images are stored).

3. In regard to claim 2, note Takahashi discloses the use of a handheld device that includes an optical sensing apparatus, buffer memory, storage medium and controller mounted within a common hand-held camera housing (column 5, lines 52-60 and figure 1).

4. In regard to claim 4, note Takahashi discloses that the controller comprises a programmable processor executing a control program for controlling the operation of said electronic camera apparatus (column 6, lines 19-26 and column 11, line 65- column 12, line 5, the processor is programmed to control the camera based on the input signals).

5. In regard to claim 5, note Takahashi discloses that the optical sensing apparatus comprises a charge-coupled device (CCD) array (column 5, line 55).

6. In regard to claim 6, note ^{Takahashi}~~Stamovich~~ discloses that the controller operating in said first mode stores each video frame captured by said optical sensing apparatus in said buffer during a respective temporary period (column 6, lines 60-65 all of the video frames are stored).

7. In regard to claim 13, note Takahashi discloses that said controller, responsive to said first user command, saves a fixed portion of the contents of said buffer memory in a persistent form at said second resolution, said fixed portion being less than all of the buffer contents (column 12, lines 1-5; the user selects only desired images).

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8. In regard to claims 16, 17, and 24, these are method claims, corresponding to the apparatus in claims 1, 6, and 13, respectively. Therefore, claims 16, 17, and 24 has been analyzed and rejected as previously discussed with respect claims 1, 6, and 13.

9. In regard to claims 27 and 28, these are method claims, corresponding to the apparatus in claim 1. Therefore, claims 27 and 28 has been analyzed and rejected as previously discussed with respect claim 1.

10. In regard to claim 31, this is a method claim, corresponding to the apparatus in claim 13. Therefore, claim 31 has been analyzed and rejected as previously discussed with respect claim 13.

11. In regard to claims 34 and 35, these are program product claims, corresponding to the apparatus in claims 1 and 6, respectively. Therefore, claims 34 and 35 have been analyzed and rejected as previously discussed with respect claims 1 and 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US Patent # 6,424,795).

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13. In regard to claim 3, note Takahashi discloses the use of an electronic camera apparatus as claimed in claim 1. Therefore, it can be seen that Takahashi fails to disclose that the electronic optical sensing apparatus is mounted in a housing remote from said buffer memory, said video storage medium and said controller. Official notice is taken that the concepts and advantages of separating the electronic optical sensing apparatus from the buffer memory, video storage medium and controller are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Takahashi device to separate the electronic optical sensing apparatus from the buffer memory, video storage medium and controller in order to transfer the image data to an external device having a greater storage capacity that can accommodate a large amount of image data.

14. Claims 7, 9, 18, 20, 29, and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US Patent # 6,424,795) in view of Scheurich (US Patent # 6,665,453).

15. In regard to claim 7, note Takahashi discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Takahashi fails to disclose that the controller operating in said first mode stores every Nth video frame captured by said optical sensing apparatus in said buffer during a respective temporary period, where $N > 1$. Scheurich discloses that the controller operating in said first mode stores every Nth video frame captured by said optical sensing apparatus in said buffer during a respective temporary

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period, where $N > 1$ (column 5, lines 25-30; and figure 7:704 –706; every fifth frame is high resolution, and all of the high resolution images are stored).

Scheurich teaches that storing every Nth video frame, where $N > 1$, can reduce cost of the device and the amount of required storage space (column 4, lines 21-30). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Takahashi device to store every Nth video frame, where $N > 1$, as suggested by Scheurich.

16. In regard to claim 9, note Takahashi discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Takahashi fails to disclose that the buffer is organized as at least one circular buffer in which the oldest stored frame is overwritten with a new frame when the new frame is captured. Scheurich discloses that the buffer is organized as at least one circular buffer in which the oldest stored frame is overwritten with a new frame when the new frame is captured (column 3, lines 38-42). Scheurich teaches that the use of a circular buffer is preferred in order to replace the oldest image with a new image when the memory is full. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Takahashi device to include the use of a circular buffer in order always have storage space for a newly captured image as suggested by Scheurich.

17. In regard to claims 18 and 20, these are method claims, corresponding to the apparatus in claims 7 and 9, respectively. Therefore, claims 18 and 20 has been analyzed and rejected as previously discussed with respect claims 7 and 9.

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18. In regard to claim 29, this is a method claim, corresponding to the apparatus in claim 7. Therefore, claim 29 has been analyzed and rejected as previously discussed with respect claim 7.

19. In regard to claims 36 and 37, these are program product claims, corresponding to the apparatus in claim 7 and 9, respectively. Therefore, claims 36 and 37 have been analyzed and rejected as previously discussed with respect claims 7 and 9.

20. Claims 8, 19, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US Patent # 6,424,795) in view of Scheurich (US Patent # 6,665,453) and further in view of Marchese (US Patent # 6,891,566).

21. In regard to claim 8, note the primary reference of Takahashi in view of Scheurich discloses the use of an electronic camera apparatus as claimed in claim 7 above. Therefore, it can be seen that the primary reference fails to disclose that N is a user-selectable parameter. Marchese discloses that the user can select which frames to record (column 8, lines 24-27; the interval is considered to be N). Marchese teaches that the storage of user-selectable portion of the contents of a memory is preferred in order to store only the frames the user wants to keep (column 8, lines 24-30). Therefore, it would have been obvious to one of ordinary skill in the art to modify the primary reference to include the storage of user-selectable portion of the contents of a memory as suggested by Marchese.

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22. In regard to claim 19, this is a method claim, corresponding to the apparatus in claim 8. Therefore, claim 19 has been analyzed and rejected as previously discussed with respect claim 8.

23. In regard to claim 30, this is a method claim, corresponding to the apparatus in claim 8. Therefore, claim 30 has been analyzed and rejected as previously discussed with respect claim 8.

24. Claims 10, 21, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US Patent # 6,424,795) in view of Scheurich (US Patent # 6,665,453) and further in view of Belz et al. (US PGPub # 2003/0090572).

25. In regard to claim 10, note the primary reference of Takahashi in view of Scheurich discloses the use of an electronic camera apparatus as claimed in claim 9 above. Therefore, it can be seen that the primary reference fails to disclose that the buffer is organized as a plurality of circular buffers, each circular buffer storing frames at a respective resolution, a first circular buffer storing frames at a higher resolution than a second circular buffer. Belz discloses the use of a storage medium that is organized as a plurality of buffers, each buffer storing frames at a respective resolution, the first buffer storing frames at a higher resolution than a second buffer (paragraphs 60-61, and by using the circular buffer taught by Scheurich for each buffer, the limitation of a plurality of circular buffers, each storing a respective resolution is met). Belz teaches that the storage of different size images is preferred in order to store a large number

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of images (paragraph 61). Therefore, it would have been obvious to one of ordinary skill in the art to modify the primary device to include the use of a plurality of buffers storing different resolutions in order to store a large number of images as suggested by Belz.

26. In regard to claim 21, this is a method claim, corresponding to the apparatus in claim 10. Therefore, claim 21 has been analyzed and rejected as previously discussed with respect claim 10.

27. In regard to claim 38, this is a program product claim, corresponding to the apparatus in claim 10. Therefore, claim 38 has been analyzed and rejected as previously discussed with respect claim 10.

28. Claims 11, 22, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US Patent # 6,424,795) in view of Makishima et al. (US Patent # 6,549,307).

29. In regard to claim 11, note Takahashi discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Takahashi fails to disclose that the resolution of frames stored in said buffer is a user-selectable parameter. Makishima disclose the use of user-selectable resolution of images (column 4, lines 50-57). Makishima teaches that the use of a user-selectable resolution is preferred in order to allow the user to select the resolution for the purpose desired, e.g. printing or display (column 1, lines 10-23). Therefore, it would have been obvious to one of ordinary skill in the art to modify

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the Takahashi device to include the use of user-selectable resolution as suggested by Makishima.

30. In regard to claim 22, this is a method claim, corresponding to the apparatus in claim 11. Therefore, claim 22 has been analyzed and rejected as previously discussed with respect claim 11.

31. In regard to claim 39, this is a program product claim, corresponding to the apparatus in claim 11. Therefore, claim 39 has been analyzed and rejected as previously discussed with respect claim 11.

32. Claims 12, 23, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US Patent # 6,424,795) in view of Marchese (US Patent # 6,891,566).

33. In regard to claim 12, note Takahashi discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Takahashi fails to disclose that said controller, responsive to said first user command, saves the entire contents of said buffer memory in a persistent form at said second resolution. Marchese disclose the use of a user configurable setting which saves the entire contents of a memory (column 8, lines 24-30). Marchese teaches that the storage of the entire contents of a memory is preferred in order to store all frames that have been received (column 8, lines 24-30). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Takahashi to include the storage of the entire contents of a memory as suggested by Marchese.

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34. In regard to claim 23, this is a method claim, corresponding to the apparatus in claim 12. Therefore, claim 23 has been analyzed and rejected as previously discussed with respect claim 12.

35. In regard to claim 40, this is a program product claim, corresponding to the apparatus in claim 12. Therefore, claim 40 has been analyzed and rejected as previously discussed with respect claim 12.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2002/0024602: note the use of a moving recording means and still recording means that operate simultaneously.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chriss S. Yoder, III whose telephone number is (571) 272-7323. The examiner can normally be reached on M-F: 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CSY
February 3, 2006


NGOC-YEN VU
PRIMARY EXAMINER